

REMARKS

Claims 1-5, 7-9 and 12-19 are pending in the above-identified application. Claim 1 is amended. No new subject matter is added. It is respectfully submitted that this Amendment is fully responsive to the Office Action dated September 19, 2006.

Claim Rejections - 35 U.S.C. §112

Claims 1-5, 7-9 and 12-19 were rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement. According to the Examiner, these claims contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. MPEP §2163(I).

Applicants respectfully disagree with the Examiner's basis for rejecting these claims. The specification clearly supports Applicants previous amendment describing a first basic unit "into which a peculiar network address is set" and a second basic unit "into which only the same network address as that of said first basic unit is set". Support is found, for example, on page 5 of the specification ("[a]ccording to the invention, a relay apparatus having a duplex structure of high line use efficiency in which it is sufficient to use one network address is provided."); page 6, lines 17-20 ("it is sufficient to use only one network connection by the line or LAN to the host computer irrespective of the duplexed structure"); and page 15, lines 7-26; and page 21, lines 19-27 ("[t]he common network address stored in the common unit address unit 104 is read out and

transmitted to the basic unit whose power source has been turned on and set into the address memory 82-1 or 82-2, thereby enabling it to be used in the host communication control unit 74-1 or 74-2 for the purpose of communicating with the host computer.”) Accordingly, the §112 rejection is improper and should be withdrawn.

These claims were also rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In particular, the Examiner asserted that “[i]t is unclear to what element that the term “it” is meant to refer.” Accordingly, to expedite prosecution and clarify the subject matter of the present invention, Applicants hereby amend claim 1 to recite “monitors [[its]] status of the present system...” Thus, Applicants respectfully request that the Examiner withdraw the §112 rejection of these claims.

Claim Rejections - 35 U.S.C. §103

Claim 1 was rejected under 35 U.S.C. §103(a) as being unpatentable over *Mikkonen*, in view of *Wang*, in further view of *Ma et al.*, (U.S. Patent No. 6,856,691).

In rejecting this claim, the Examiner acknowledged that *Mikkonen* does not disclose a common unit or that the second basic unit has *only* the same network address as the first basic unit. However, the Examiner concluded that it would have been obvious to separate the monitoring functionality present within *Mikkonen*’s units into a separate device that performs the same functions as described by *Mikkonen* since it has been held that separating functionality into

distinct devices that had been previously accomplished in a single device involves only routine skill in the art. The Examiner also concluded that *Wang* discloses such an embodiment where a common unit is separate from both a first and second basic unit [Figure 1 «item 160» | column 7 «lines 3-22»]. Thus, the Examiner concluded that it would have been obvious to implement the monitoring functionality from *Mikkonen's* network nodes into a separate unit as taught by *Wang* for the well known advantages provided by a shared unit: centralizing router selection, automatic failover detection and alleviating the responsibility from *Mikkonen's* network nodes. The Examiner also asserted:

...in regards to the limitation of setting only the same network address, Ma discloses assigning a single network address to relay apparatuses (switches) [column 2, lines 57-65]...Thus, it would have been obvious...to modify Mikkonen's relay apparatuses so they are assigned only a single address to reduce the costs of the system.

Applicants respectfully disagree with the Examiner's basis for rejection. For at least the following reasons, a *prima facie* case of obviousness has not been presented.

However, even assuming that the *Ma* reference discloses assigning a single network address to switches, Applicants maintain the position that the Examiner's obviousness rejection of claim 1 is unsupported by the cited art. As discussed in Applicants July 17, 2006 remarks, *Mikkonen teaches away* from the claimed invention, *e.g.*, different IP addresses. For example, *Mikkonen* teaches nodes 100a, 100b with different IP addresses IPA, IPB, IPC, IPD associated with each interface of the nodes [Fig. 1; column 3, lines 30-44]. Therefore, the primary reference does NOT support a *prima facie* case of obviousness because the reference makes clear

that the IP and MAC addresses of the two interfaces of each node are different. See, Column 2, lines 24-28.

Also, the purpose and intended function of the *Mikkonen* network node and system is to provide fault tolerance achieved by redundancy, *i.e.*, by using at least two network nodes in parallel, wherein the IP and MAC addresses of the two interfaces of each node are different. See Abstract. Therefore, even assuming the *Mikkonen* apparatus could be modified to incorporate only a single network address (as purportedly described in the *Ma* reference), such a modification would NOT have been obvious because it would destroy the purpose and intended function of the invention disclosed in the *Mikkonen* reference. Accordingly, a *prima facie* case of obviousness has not been properly presented and the rejection of independent claim 1 should be withdrawn.

Claims 2-5, 7 and 12 were rejected under 35 U.S.C. §103(a) as unpatentable over *Mikkonen*, *Ma* and *Wang*, in further view of *Ould-Ali et al.*, (U.S. Patent No. 5,649,091) and *Li et al.*, (U.S. Patent No. 5,473,599) for the reasons stated in the November 2005 Office Action. However, these claims depend from claim 1 and should likewise be allowable in view of the above remarks.

Claims 8 and 9 were rejected under 35 U.S.C. §103(a) as unpatentable over *Mikkonen*, *Ma*, *Ould-Ali*, *Li* and *Wang*, in further view of *AAPA* for the reasons stated in the November 2005 Office Action. However, these claims depend from claim 1 and should likewise be allowable in view of the above remarks.

Claims 15-17 were rejected under 35 U.S.C. §103(a) as unpatentable over *AAPA*, in view of *Mikkonen*, in further view of *Ma*. However, Applicants respectfully disagree with the Examiner's rejection of these claim for at least the reasons stated above regarding *Mikkonen* and claim 1. Accordingly, Applicants request that the Examiner withdraw this rejection of claims 15-17.

Claim 18 was rejected under 35 U.S.C. §103(a) as unpatentable over *AAPA*, *Ma* and *Mikkonen*, in further view of *Wang*. However, this claim depends from independent claim 17 and should likewise be allowable in view of the above remarks.

Claim 19 was rejected under 35 U.S.C. §103(a) as unpatentable over *AAPA*, *Ma* and *Mikkonen*, in further view of *Ould-Ali*. However, this claim depends from independent claim 17 and should likewise be allowable in view of the above remarks.

Claim 1 was also rejected under 35 U.S.C. §103(a) as unpatentable over *AAPA*, in view of *Lalaure et al.*, (U.S. Patent No. 6,640,314). In rejecting these claims, the Examiner acknowledged that *AAPA* does NOT disclose that the basic units are in one relay apparatus or that they share the same network address. However, the Examiner asserted:

Lelaure solves AAPA's problems by integrating both basic units into a single relay apparatus and assigning the same network addresses to each basic unit [Figure 3; column 3, lines 13-16 and 27-32]. Lelaure discloses that there are two basic units, or PLCs. One basic unit is a "normal" PLC and is assigned IP address, @IPn. The second basic unit is a "standby" PLC. When the "normal" PLC fails, operations are transferred to the second basic unit, whereby the "standby" PLC becomes "normal" and the IP address @IPn is transferred to this PLC. Thus, only one IP address is utilized. Therefore, the Examiner concludes that it would have been obvious to modify AAPA's basic units with Lelaure's teachings such that the basic units are housed in a single relay

apparatus and are able to share a single common address. Such a modification is desirable and advantageous because it provides easier failover capability to devices such that the flow in traffic does not need to be changed as the network address remains the same [Lelaure, column 3, lines 13-16].

Applicants respectfully disagree with the Examiner's aforementioned reasons for rejecting claim 1. The *Lelaure* reference does NOT teach what the Examiner is purporting it to teach. For example, the reference does NOT teach or suggest "a second basic unit into which only the same network address as that of said first basic unit is set..." Instead, the "standby" state has an IP address denoted @IPs and the "normal" state has an IP address denoted @IPn. See col. 3, lines 17-21. Also, as shown in Figure 2 and described in col. 3, lines 47-49, "[i]n the initial state (FIG. 2), the "normal" PLC is AP-A that has addresses @IPn/@MAC1 and the "standby" PLC AP-B has addresses @IPs/@MAC2." Accordingly, even if one were to combine the cited references, the combination would NOT result in the claimed invention.

Claim 2 was also rejected under 35 U.S.C. §103(a) as unpatentable over *AAPA* and *Lelaure*, in further view of *Wang et al.*, (U.S. Patent No. 6,587,970). However, this claim depends from independent claim 1 and should likewise be allowable in view of the above remarks.

Claim 1 was also rejected under 35 U.S.C. §103(a) as unpatentable over *Lelaure*, in view of in view of *Wang*. However, for at least the reasons discussed above, Applicants respectfully submit that even if one were to look to the teachings of *Lelaure* and *Wang*, the resultant

combination would NOT be the claimed invention. Accordingly, Applicants request that the Examiner withdraw this rejection of claim 1.

Claims 2-5, 7 and 12 were also rejected under 35 U.S.C. §103 (a) as unpatentable over *Lelaure* and *Wang*, in further view of *Ould-Ali et al.*, and *Li et al.*. However, these claims depend from independent claim 1 and should likewise be allowable in view of the above remarks.

Claims 8 and 9 were rejected under 35 U.S.C. §103 (a) as unpatentable over *Lelaure*, *Ould-Ali*, *Li* and *Wang*, in further view of *AAPA*. However, these claims depend from independent claim 1 and should likewise be allowable in view of the above remarks.

Claims 15-17 were rejected under 35 U.S.C. §103(a) as unpatentable over *AAPA*, in view of *Lelaure*. However, Applicants respectfully disagree with the Examiner's rejection of claims 15 and 17 for at least the reasons stated above regarding *Lelaure* and claim 1. Accordingly, Applicants request that the Examiner withdraw this rejection of claims 15-17.

Claim 19 was rejected under 35 U.S.C. §103(a) as unpatentable over *AAPA* and *Lelaure*, in further view of *Ould-Ali*. However, this claim depends from independent claim 17 and should likewise be allowable in view of the above remarks.

Conclusion

In view of the aforementioned amendments and accompanying remarks, Applicants submit that the claims, as herein amended, are in condition for allowance. Applicants request such action at an early date.

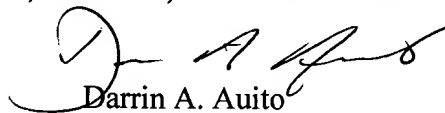
Application No. 09/891,387
Attorney Docket No. 010803

Amendment under 37 C.F.R. §1.111
Amendment filed: December 19, 2006

If the Examiner believes that this application is not now in condition for allowance, the Examiner is requested to contact Applicants' undersigned attorney to arrange for an interview to expedite the disposition of this case.

If this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. The fees for such an extension or any other fees that may be due with respect to this paper may be charged to Deposit Account No. 50-2866.

Respectfully submitted,
WESTERMAN, HATTORI, DANIELS & ADRIAN, LLP



Darrin A. Auito
Attorney for Applicants
Registration No. 56,024
Telephone: (202) 822-1100
Facsimile: (202) 822-1111

DAA/rf